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Typical Plant Growth Flat

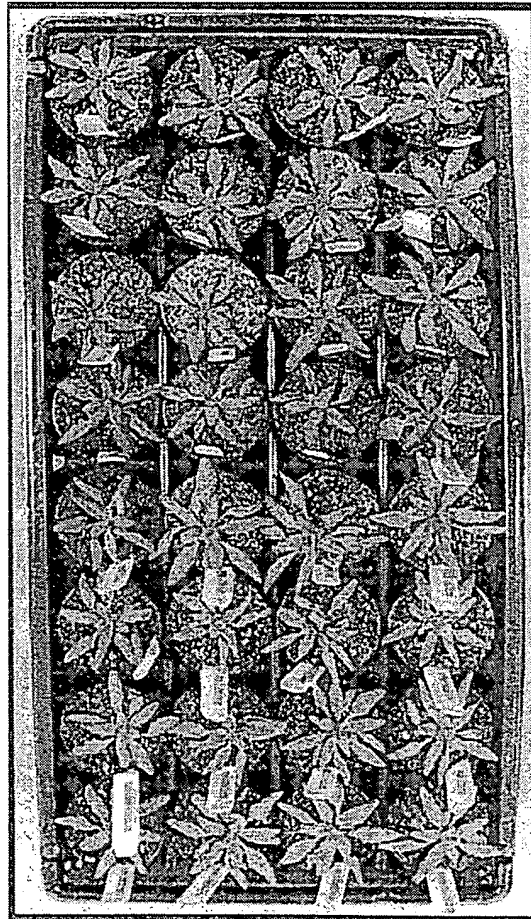


FIG. 1

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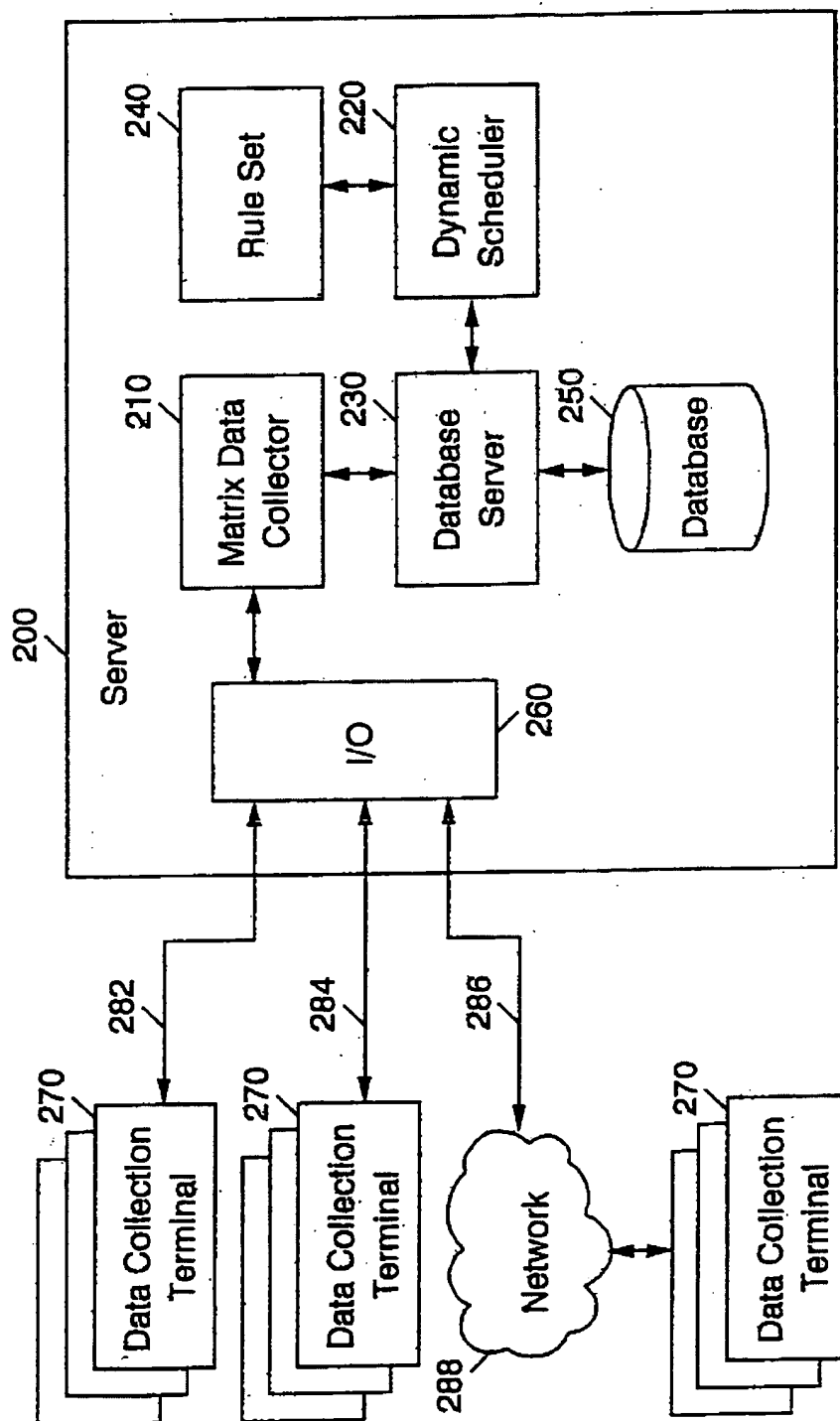


FIG. 2

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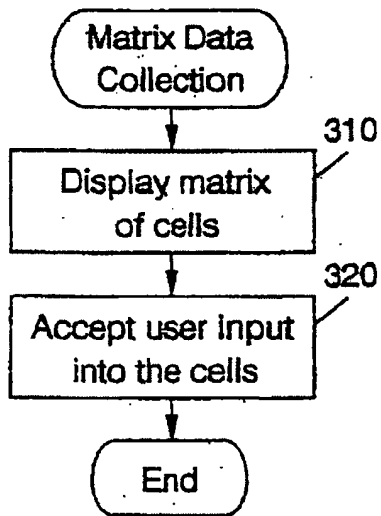


FIG. 3

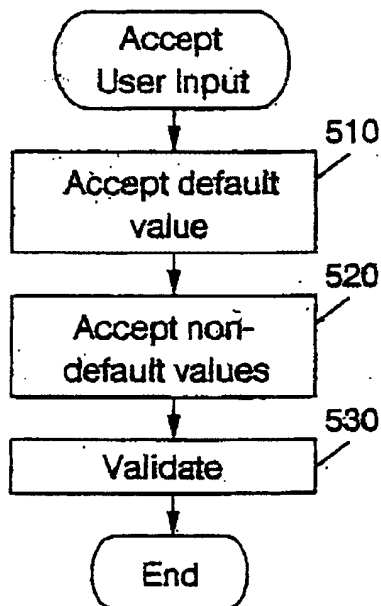


FIG. 5

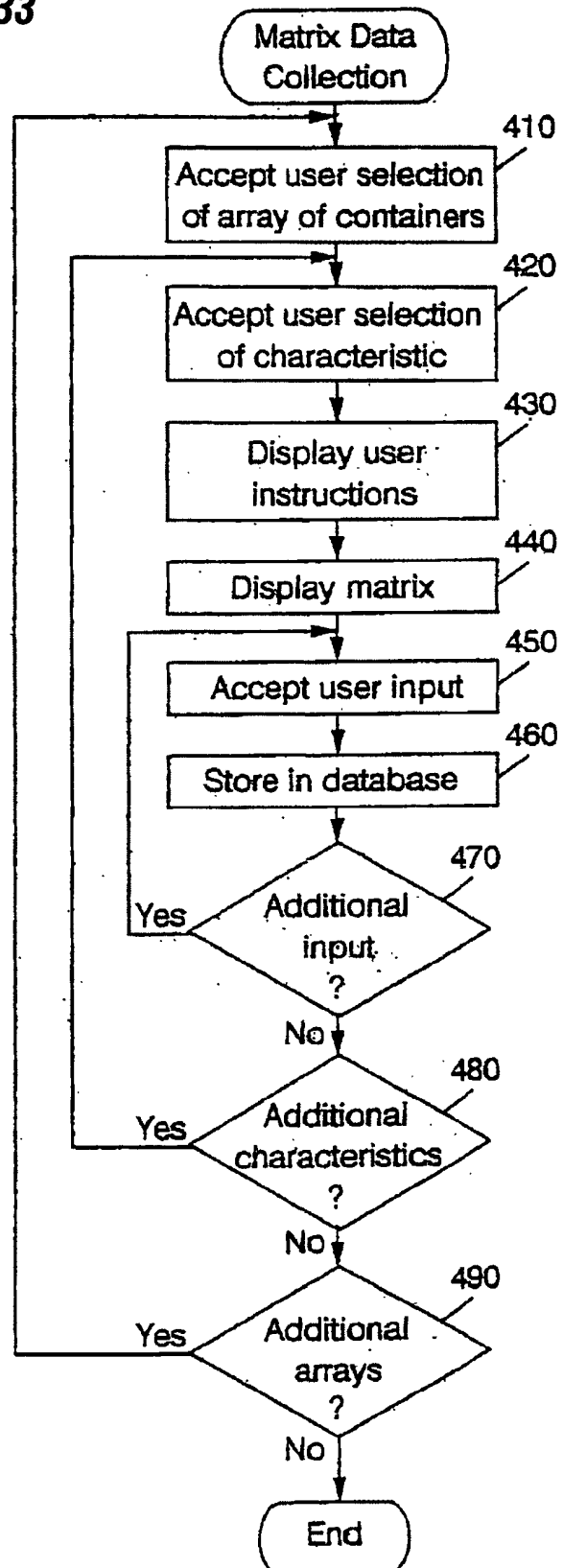


FIG. 4

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Matrix File Tools Help

Selection

Container ID: 100097081

Operation: 04/02 | ARABID OP-3F-20

Component: Can flower buds be seen?

Matrix Input

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| 200049275 <input type="radio"/> Yes <input type="radio"/> No | 200049276 <input type="radio"/> Yes <input type="radio"/> No | 200049265 <input type="radio"/> Yes <input type="radio"/> No | 200049266 <input type="radio"/> Yes <input type="radio"/> No | 200049287 <input type="radio"/> Yes <input type="radio"/> No | 200049288 <input type="radio"/> Yes <input type="radio"/> No | 200049277 <input type="radio"/> Yes <input type="radio"/> No | 200049278 <input type="radio"/> Yes <input type="radio"/> No |
| 200049267 <input type="radio"/> Yes <input type="radio"/> No | 200049268 <input type="radio"/> Yes <input type="radio"/> No | 200049289 <input type="radio"/> Yes <input type="radio"/> No | 200049290 <input type="radio"/> Yes <input type="radio"/> No | 200049279 <input type="radio"/> Yes <input type="radio"/> No | 200049280 <input type="radio"/> Yes <input type="radio"/> No | 200049269 <input type="radio"/> Yes <input type="radio"/> No | 200049291 <input type="radio"/> Yes <input type="radio"/> No |
| 200049202 <input type="radio"/> Yes <input type="radio"/> No | 200049281 <input type="radio"/> Yes <input type="radio"/> No | 200049282 <input type="radio"/> Yes <input type="radio"/> No | 200049270 <input type="radio"/> Yes <input type="radio"/> No | 200049271 <input type="radio"/> Yes <input type="radio"/> No | 200049293 <input type="radio"/> Yes <input type="radio"/> No | 200049283 <input type="radio"/> Yes <input type="radio"/> No | 200049284 <input type="radio"/> Yes <input type="radio"/> No |
| 200049272 <input type="radio"/> Yes <input type="radio"/> No | 200049294 <input type="radio"/> Yes <input type="radio"/> No | 200049295 <input type="radio"/> Yes <input type="radio"/> No | 200049285 <input type="radio"/> Yes <input type="radio"/> No | 200049286 <input type="radio"/> Yes <input type="radio"/> No | 200049273 <input type="radio"/> Yes <input type="radio"/> No | 200049274 <input type="radio"/> Yes <input type="radio"/> No | 200049296 <input type="radio"/> Yes <input type="radio"/> No |

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001034031.0.8

FIG. 6

Matrix

File Tools Help

Selection

Container ID

100086141

Operation

Component

100086141

100086155

100086170

100086184

100086198

100086212

100086236

100086238

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-03130093331.0.7

FIG. 7

Matrix

File Tools Help

Selection

Container ID

100086141

Operation

*02/24 | ARABIDOP PLATE 9
*02/25 | ARABIDOP PLATE 10
*02/26 | ARABIDOP PLATE 11
*02/27 | ARABIDOP PLATE 12
*02/28 | ARABIDOP PLATE 13
02/28 | ARABIDOP HS 6R VP
02/28 | ROOT IMAGE PICTURE
02/28 | ROSETTE PLATE IMAGE PICTURE

Component

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-03130093331.0.7

FIG. 8

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Matrix

File Tools Help

Selection

Container ID

100086141

Operation

02/28 | ARABIDOP HS 6R VP

Component

Lateral roots per seedling

Root color

Root gravitropic response

Root growth vector

Root shape

Root size

Matrix Input

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-03130093331-0.7

FIG. 9

Matrix

File Tools Help

Selection

Container ID

100086141

Operation

02/28 | ARABID OP HS 6R VP

Component

Lateral roots per seedling

Matrix Input

200050344

200050345

200050346

200050347

200050348

200050349

200050350

200050351

200050352

200050353

Status

Upload Status

Measurement Units for the Component [Lateral roots per seedling], are in Item Count

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-03130003330.0.7

FIG. 10

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Matrix

File Tools Help

Selection

Container ID

100086141

Operation

02/28 | ARABID OP HS 6R VP

Component

Root color

Matrix Input

200050344

200050345

200050346

200050347

200050348

200050349

200050350

200050351

200050352

200050353

RED/PURPLE

BROWN

BLACK

YELLOW

GREEN

WILD TYPE

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-03130003330.0.7

FIG. 11

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Matrix

File Tools Help

Selection

Container ID

100086141

Operation

02/28 | ROOT IMAGE PICTURE

Component

Picture Taken

Matrix Input

200050344

☒ Yes ☐ No

200050345

☐ Yes ☐ No

200050346

☐ Yes ☐ No

200050347

☐ Yes ☐ No

200050348

☐ Yes ☐ No

200050349

☐ Yes ☐ No

200050350

☐ Yes ☐ No

200050351

☐ Yes ☐ No

200050352

☐ Yes ☐ No

200050353

☐ Yes ☐ No

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

FENRIR [Production]

CDEHAVEN-031300933301.0.7

FIG. 12

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Matrix File Tools Help

Selection

Container ID: 100097081 Operation: 04/02 | ARABID OP-3F-20 Component: Can flower buds be seen?

Matrix Input

| 200049275 | 200049276 | 200049265 | 200049266 | 200049287 | 200049288 | 200049277 | 200049278 |
|--|--|---|--|---|---|--|---|
| <input checked="" type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 200049267 | 200049268 | 200049289 | 200049290 | 200049279 | 200049280 | 200049269 | 200049291 |
| <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input checked="" type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 200049202 | 200049281 | 200049282 | 200049270 | 200049283 | 200049284 | 200049274 | 200049296 |
| <input type="radio"/> Yes <input type="radio"/> No | <input checked="" type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| 200049272 | 200049294 | 200049295 | 200049285 | 200049285 | 200049285 | 200049285 | 200049285 |
| <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input checked="" type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |

Set Default Values

☐ Yes ☒ No

Apply Cancel

Status

Upload Status

Commands

Set Defaults Commit Reset Options Exit

CDEHAVEN GARM [Development] CDEHAVEN-0313001034031.0.8

FIG. 13

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Matrix File Tools Help

Selection

Container ID: 100097081 Operation: 04/02 | ARABID OP-3F-20 Component: Can flower buds be seen?

Matrix Input

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| 200049275 Yes <input checked="" type="radio"/> No <input type="radio"/> | 200049276 Yes <input type="radio"/> No <input type="radio"/> | 200049265 Yes <input type="radio"/> No <input type="radio"/> | 200049266 Yes <input type="radio"/> No <input type="radio"/> | 200049287 Yes <input type="radio"/> No <input type="radio"/> | 200049288 Yes <input type="radio"/> No <input type="radio"/> | 200049277 Yes <input type="radio"/> No <input type="radio"/> | 200049278 Yes <input type="radio"/> No <input type="radio"/> |
| 200049267 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049268 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049289 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049290 Yes <input checked="" type="radio"/> No <input type="radio"/> | 200049279 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049280 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049269 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049291 Yes <input type="radio"/> No <input checked="" type="radio"/> |
| 200049202 Yes <input checked="" type="radio"/> No <input type="radio"/> | 200049281 Yes <input checked="" type="radio"/> No <input type="radio"/> | 200049282 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049270 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049271 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049293 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049283 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049284 Yes <input type="radio"/> No <input checked="" type="radio"/> |
| 200049272 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049294 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049295 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049285 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049286 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049273 Yes <input type="radio"/> No <input checked="" type="radio"/> | 200049274 Yes <input checked="" type="radio"/> No <input type="radio"/> | 200049296 Yes <input type="radio"/> No <input checked="" type="radio"/> |

Status

Upload Status: [Empty Box]

Commands

Set Defaults Commit Reset Options Exit

CDEHAVEN GARM [Development] CDEHAVEN-0313001034031.0.8

FIG. 14

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Matrix File Tools Help

Selection

Container ID: 100084318 Operation: *02/18|ARABID OP PLATE 3A Component: *Seed Status

Matrix Input

| 200047232 | 200047233 | 200047234 | 200047235 | 200047236 | 200047237 | 200047238 | 200047239 | 200047240 | 200047241 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| WILD TY | WILD TY | WILD TY | WILD TY | WILD TY | WILD TY | WILD TY | WILD TY | WILD TY | WILD TY |

Change Input

Old Value: 200047237 WILD TY

New Value: 200047237

Change Reason:

Apply Cancel

Status

Upload Status

Commands

Set Defaults Commit Reset Options Exit

CDEHAVEN GARM [Development] CDEHAVEN-0313001034031.0.8

FIG. 15

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File Tools Help

Selection

Container ID

100084318

Operation

*02/181ARABID OP PLATE 3A

Component

*Seed status

Matrix Input

200047232

WILD TY

200047233

WILD TY

200047234

WILD TY

200047235

WILD TY

200047236

WILD TY

200047237

WILD TY

200047238

WILD TY

200047239

WILD TY

200047240

WILD TY

200047241

WILD TY

Change Input

Old Value

200047238

WILD TY

New Value

200047238

WILD TY

NO SEED

MUTANT

KILLED

Change Reason

Apply

Cancel

Status

Upload Status

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001034031.0.8

Commands

Set Defaults

Commit

Reset

Options

Exit

FIG. 16

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Matrix

File Tools Help

Selection

Container ID

100084318

Operation

*02/18/ARABID OP PLATE 3A

Component

*Seed status

Matrix Input

| | | | | | | | | | | | | | | | | | | | |
|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| 200047232 | WILD TY | 200047233 | WILD TY | 200047234 | WILD TY | 200047235 | WILD TY | 200047236 | WILD TY | 200047237 | WILD TY | 200047238 | WILD TY | 200047239 | WILD TY | 200047240 | WILD TY | 200047241 | WILD TY |
|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|

Change Input

Old Value

200047237

WILD TY

New Value

200047237

MUTAN

Change Reason

CALCULATION CHANGED BY ANOTHER RESULT

CALCULATION ERROR

CLERICAL ERROR

TRANSCRIPTION ERROR

REDUNDANT FILENAME UPLOAD

Apply

Cancel

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001034031.0.8

FIG. 17

Matrix

File Tools Help

Selection

Container ID

100084318

Operation

*02/181ARABID OP PLATE 3A

Component

*Seed status

Matrix Input

200047232

WILD TY

200047233

WILD TY

200047234

WILD TY

200047235

WILD TY

200047236

WILD TY

200047237

WILD TY

200047238*

MUTANT

200047239

WILD TY

200047240

WILD TY

200047241

WILD TY

Status

Upload Status

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001034031.0.8

FIG. 18

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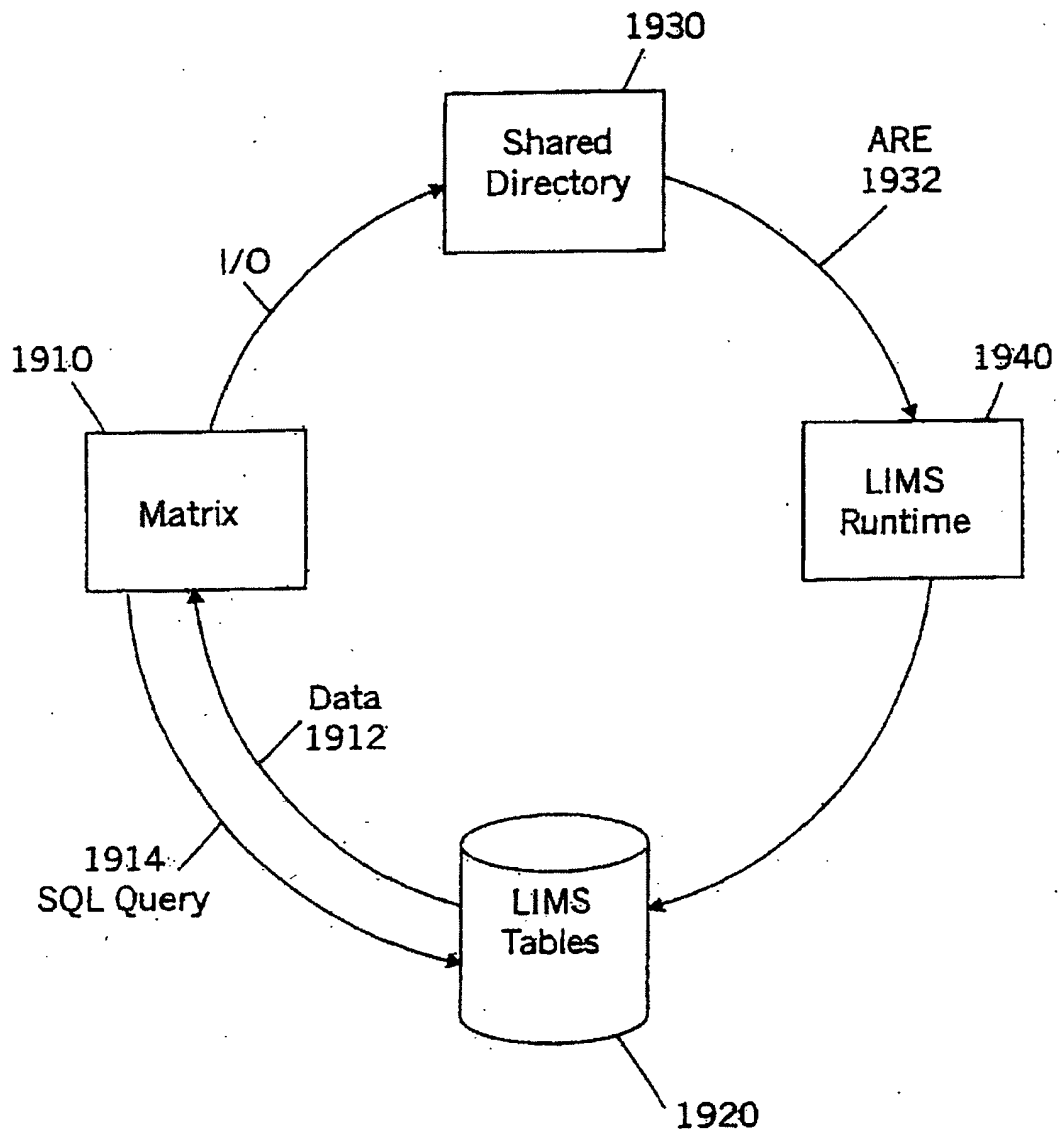


FIG. 19

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Matrix

File Tools Help

Selection

Container ID

100084320

Operation

02/19 | ARABID OP PLATE 4

Component

Length of primary root

Matrix Input

| | | | | | | | | | | | | | | | | | | | |
|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|
| 200047242 | 1 | 200047243 | 1 | 200047244 | 2 | 200047245 | 1 | 200047246 | 3 | 200047247 | 3 | 200047248 | 3 | 200047249 | 3 | 200047250 | 3 | 200047251 | 3 |
|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|

Status

Upload Status

MX-03130012480871.are

Measurement Units for the Component [Length of primary root], are in mm

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001247321.0.7

FIG. 20

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File Tools Help

Selection

Container ID

100084316

Operation

02/18 | ARABID OP PLATE 4

Component

Length of primary root

Matrix Input

Upload Status

MX-03130012480871.are

Measurement Units for the Component [Length of primary root], are in mm

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001247321.0.7

FIG. 21

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Matrix

File Tools Help

Selection

Container ID

100084316

Operation

02/18 | ARABID OP PLATE 4

Component

Length of primary root

Matrix Input

Status

Upload Status

MX-03130012480871.are

Measurement Units for the Component [Length of primary root], are in mm

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001247321.0.7

FIG. 22

Matrix

File Tools Help

Selection

Container ID

100084318

Operation

02/19 I ARABID OP PLATE 4

Component

Length of primary root

Matrix Input

Status

Upload Status

MX-03130012544058.are

MX-03130012494154.are

MX-03130012480871.are

Measurement Units for the Component [Length of primary root], are in mm

Commands

Set Defaults

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001247321.0.7

FIG. 23

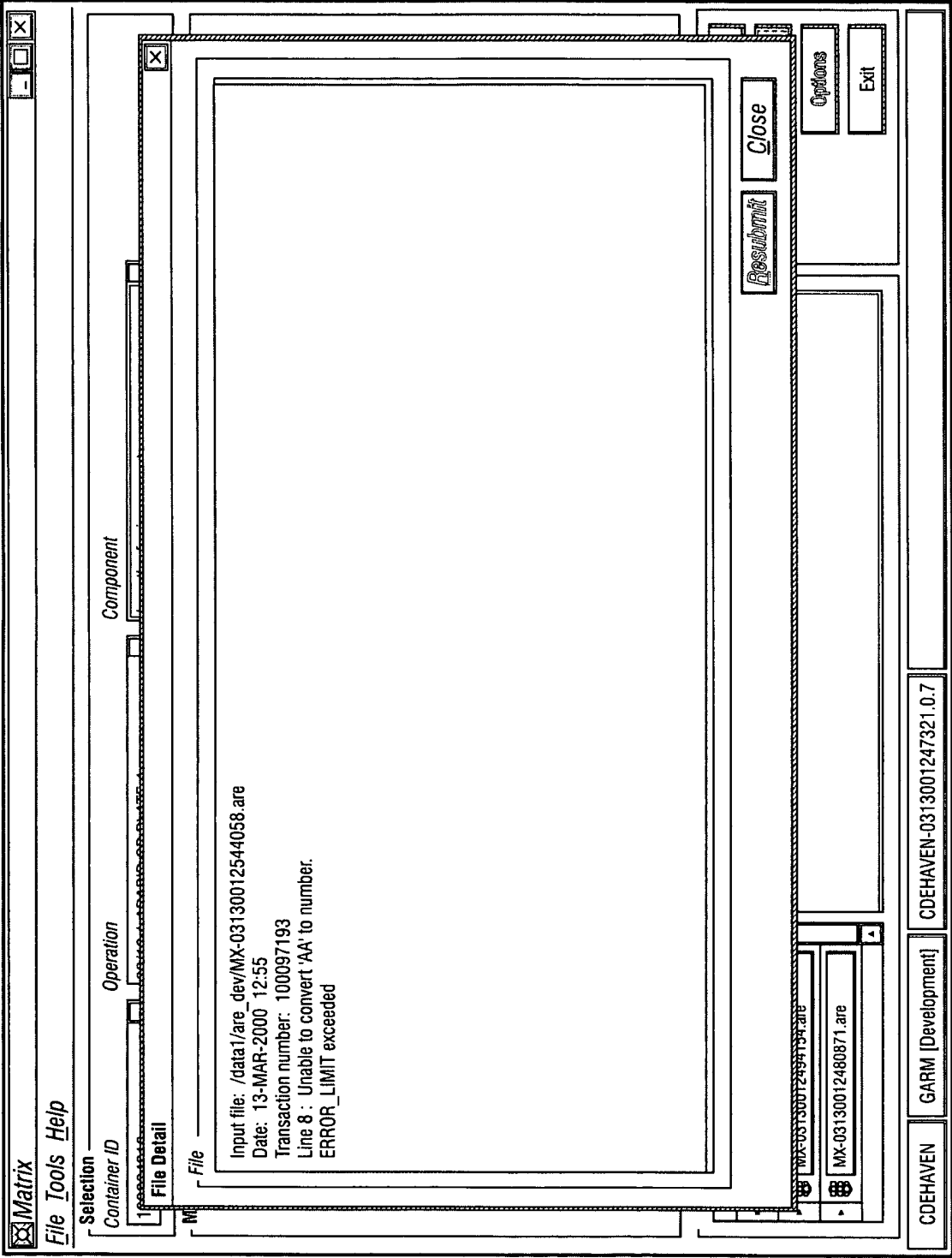


FIG. 24

Matrix

File Tools Help

Selection

Container ID

100084318

Operation

02/19 .I ARABID OP PLATE 4

Component

Seedling color

Matrix Input

Status

Upload Status

MX-03130012563529.are

MX-03130012544058.are

MX-03130012494154.are

Commands

Set Details

Commit

Reset

Options

Exit

CDEHAVEN

GARM [Development]

CDEHAVEN-0313001247321.0.7

FIG. 25

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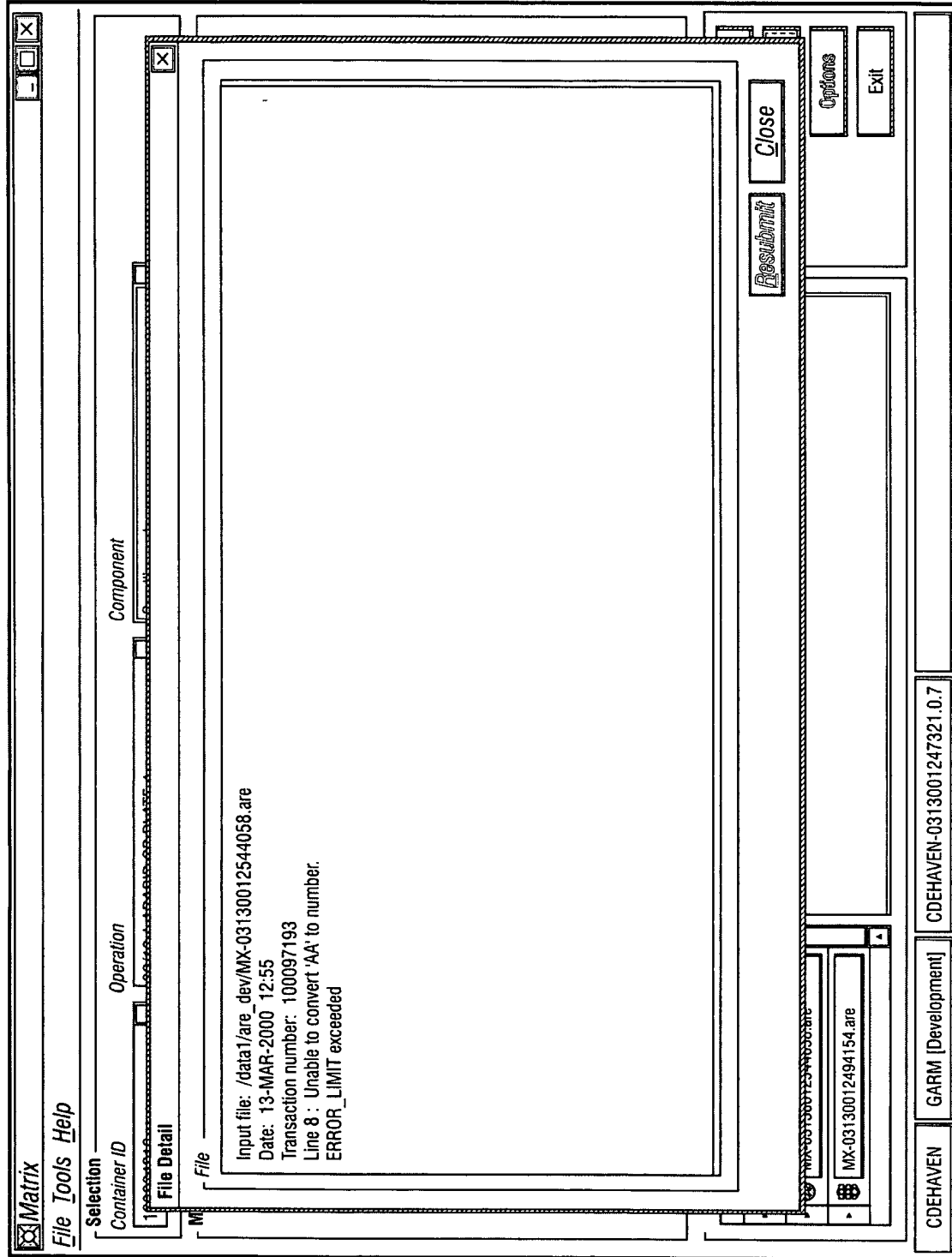


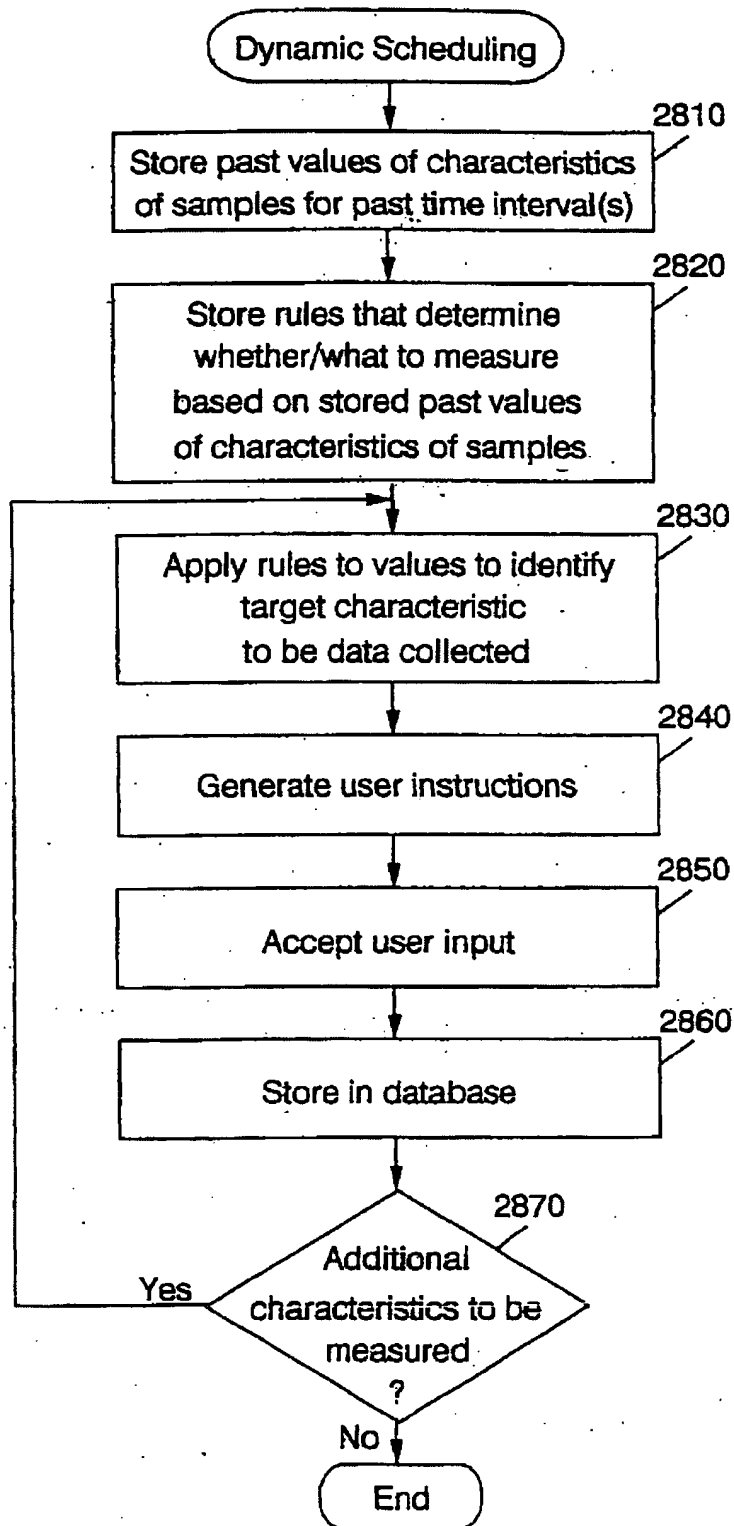
FIG. 26

Static Measurement Plan for
Wild-Type



| Data | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 | Day 9 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A | | | | | | | | | |
| B | | | | | | | | | |
| C | | | | | | | | | |
| D | | | | | | | | | |
| E | | | | | | | | | |
| F | | | | | | | | | |
| G | | | | | | | | | |
| H | | | | | | | | | |
| I | | | | | | | | | |

FIG. 27

26/33**FIG. 28**

Variable Measurement Plan for Mutants



| Data | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 | Day 9 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A | | | | | | | | | |
| B | | | | | | | | | |
| C | | | | | | | | | |
| D | | | | | | | | | |
| E | | | | | | | | | |
| F | | | | | | | | | |
| G | | | | | | | | | |
| H | | | | | | | | | |
| I | | | | | | | | | |

FIG. 29

Extinguishing a Measurement



| Data | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 | Day 9 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A | | | No | No | No | Yes | (Yes) | (Yes) | |
| B | | | | | | | | | |

FIG. 30

Starting a Measurement



| Data | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 | Day 9 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A | | | No | No | No | Yes | (Yes) | (Yes) | |
| B | | | | | | No | No | Yes | |

FIG. 31

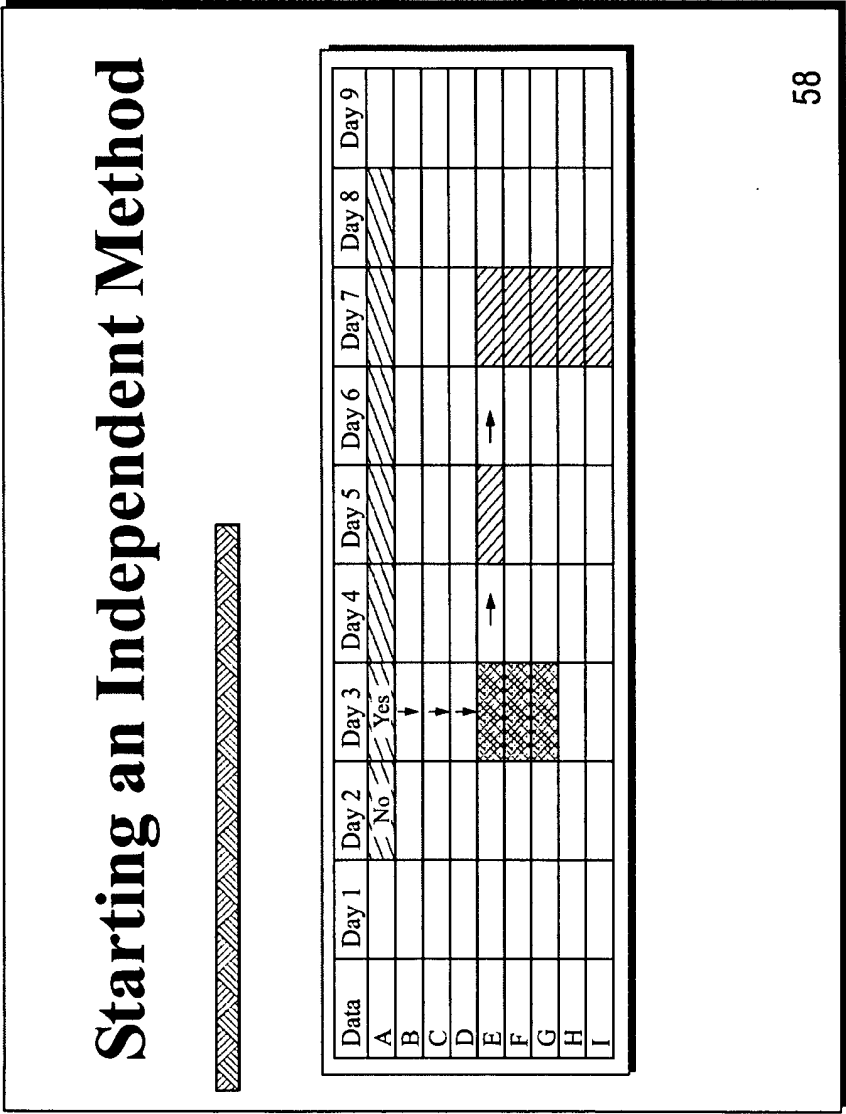


FIG. 32

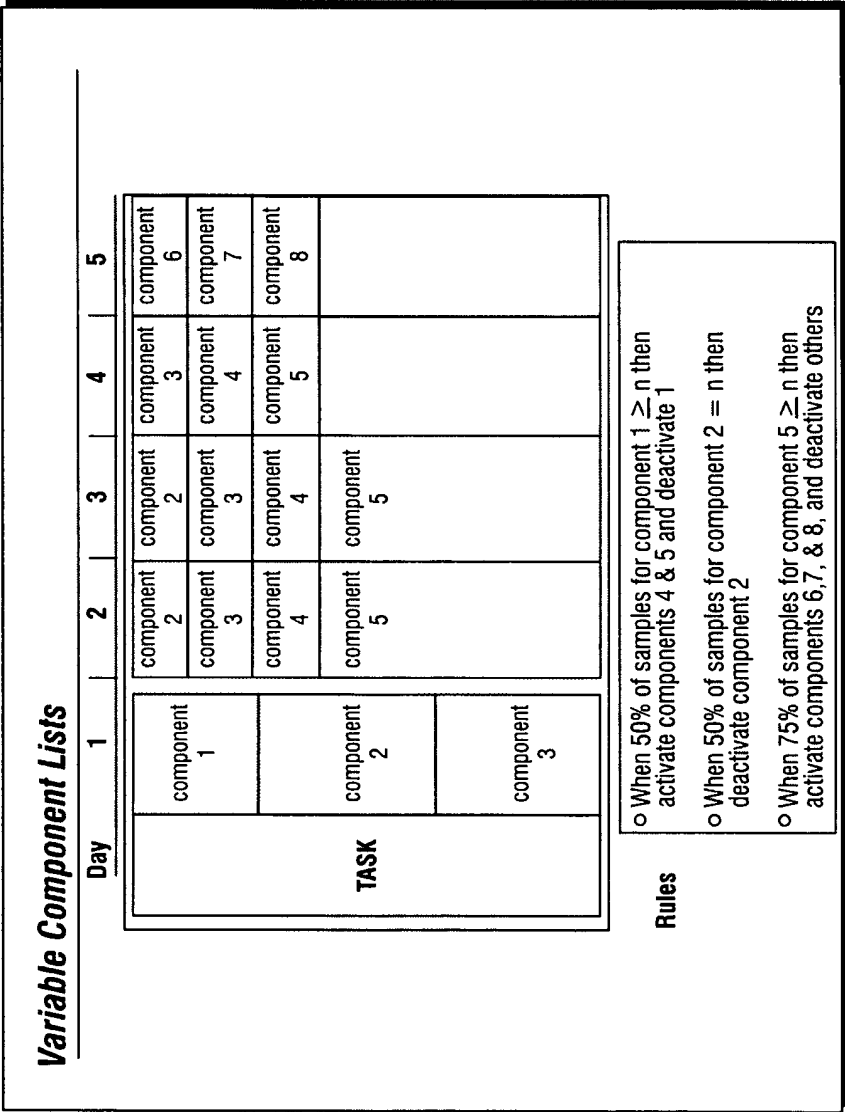
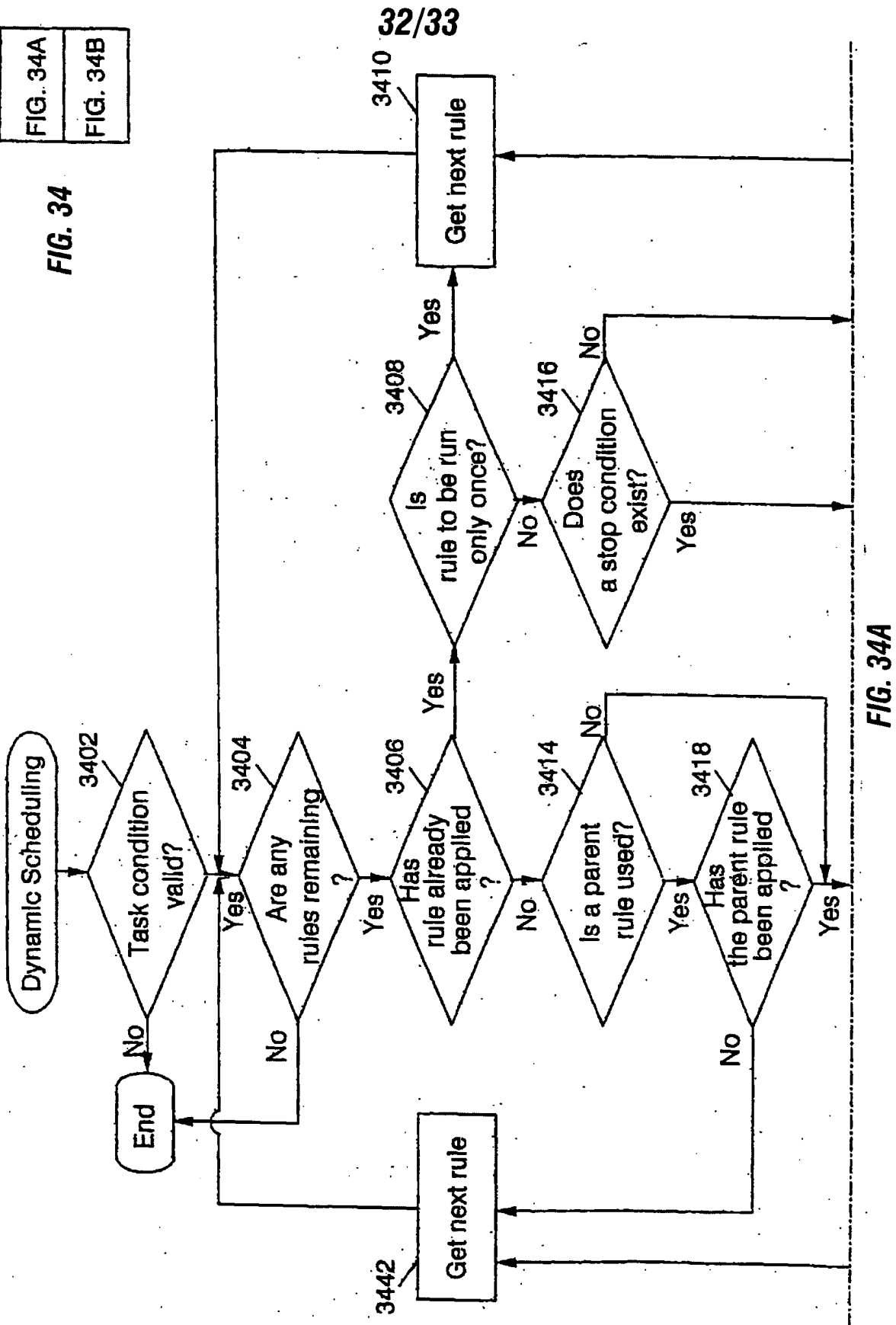


FIG. 33

| |
|----------|
| FIG. 34A |
| FIG. 34B |

FIG. 34



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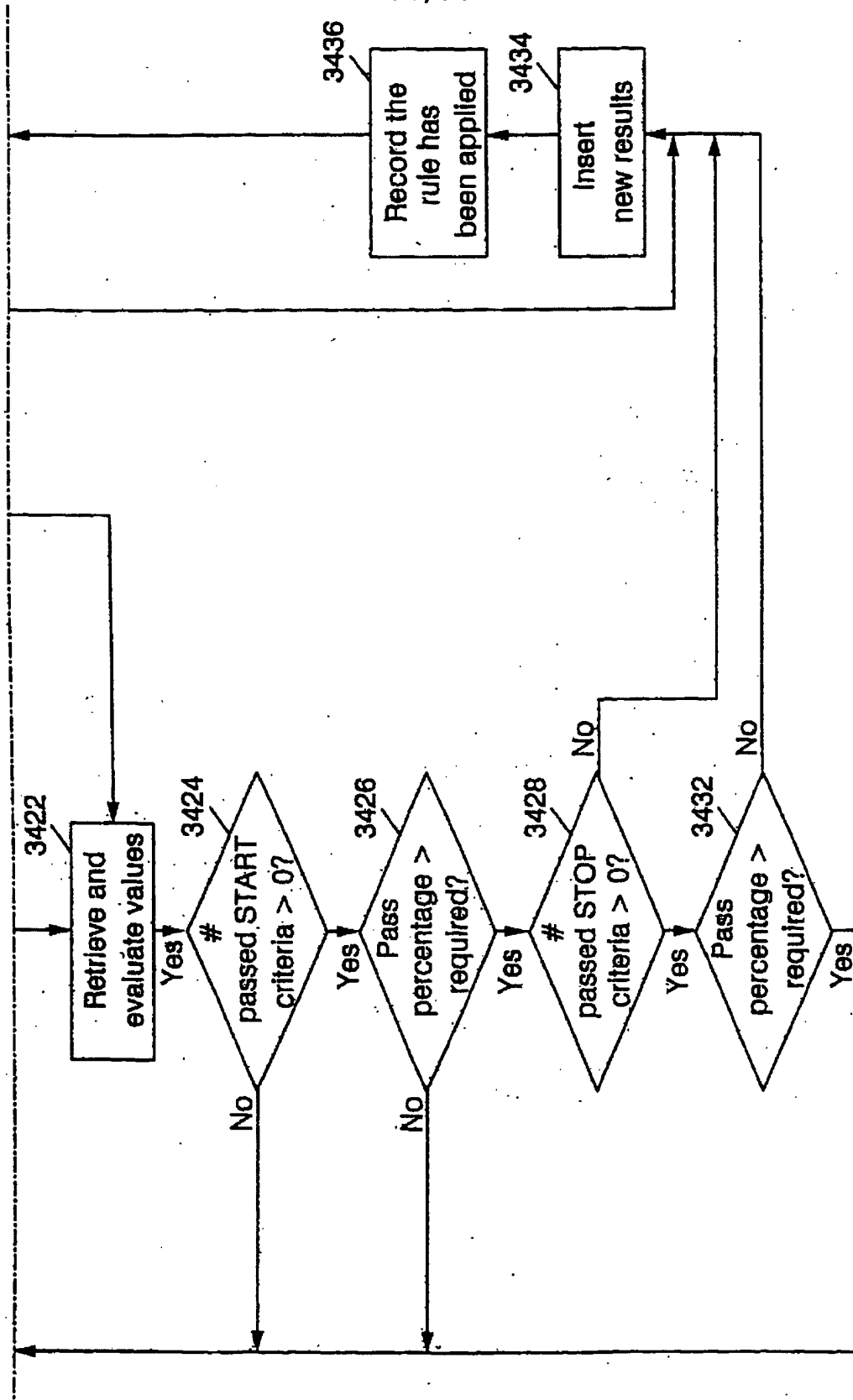


FIG. 34B